

Prior Art
Figure 1

0937431-121500

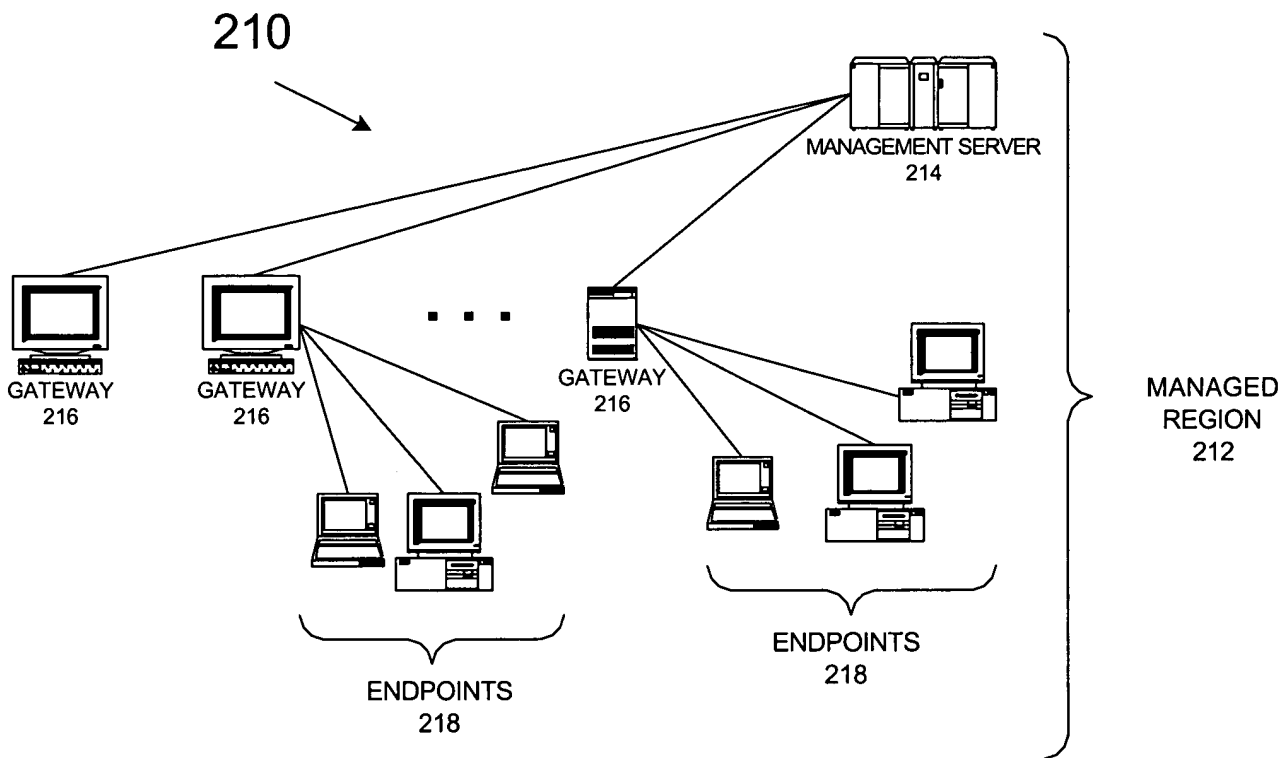


Figure 2A

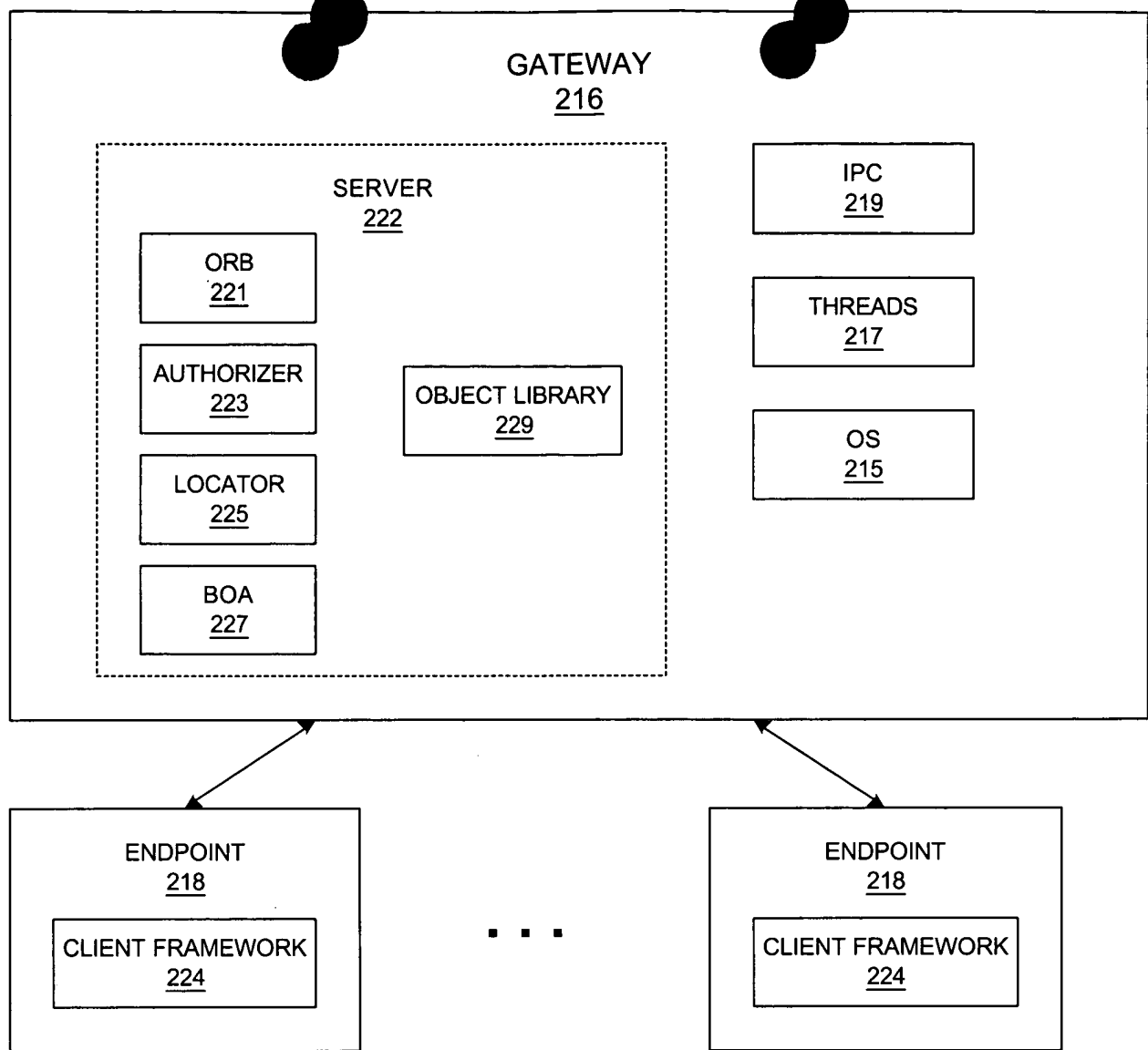


Figure 2B

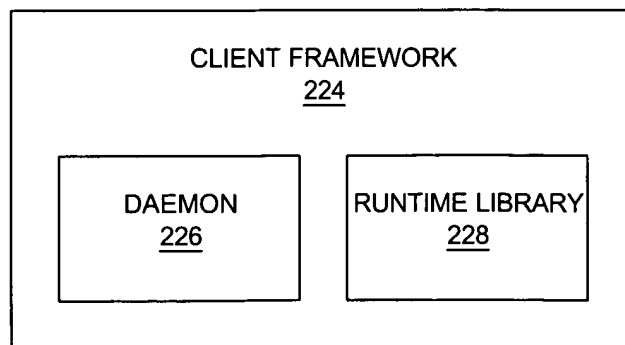


Figure 2C

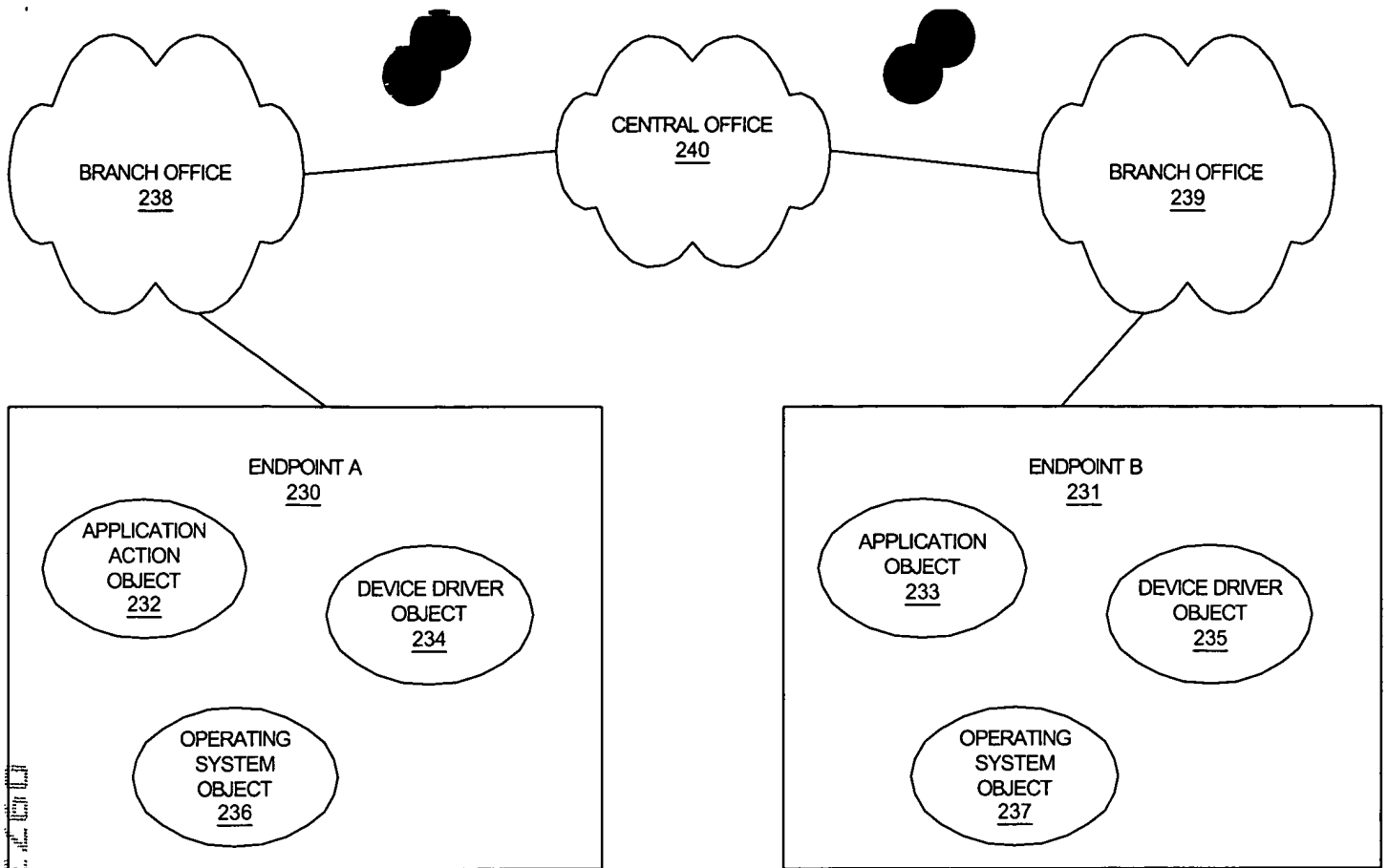


Figure 2D

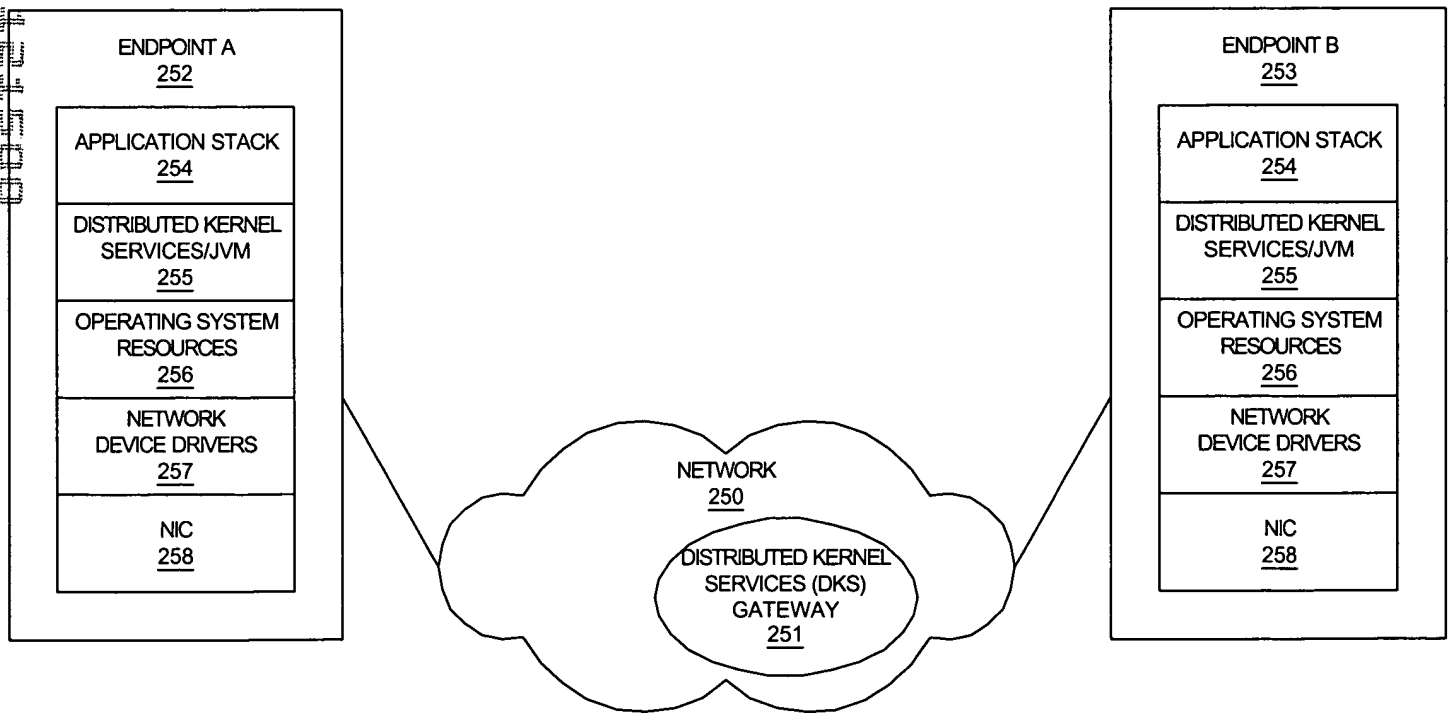


Figure 2E

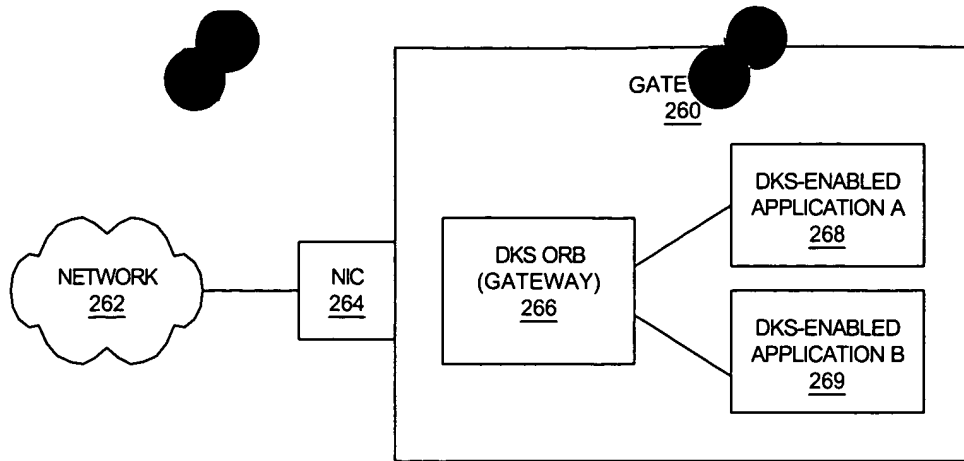


Figure 2F

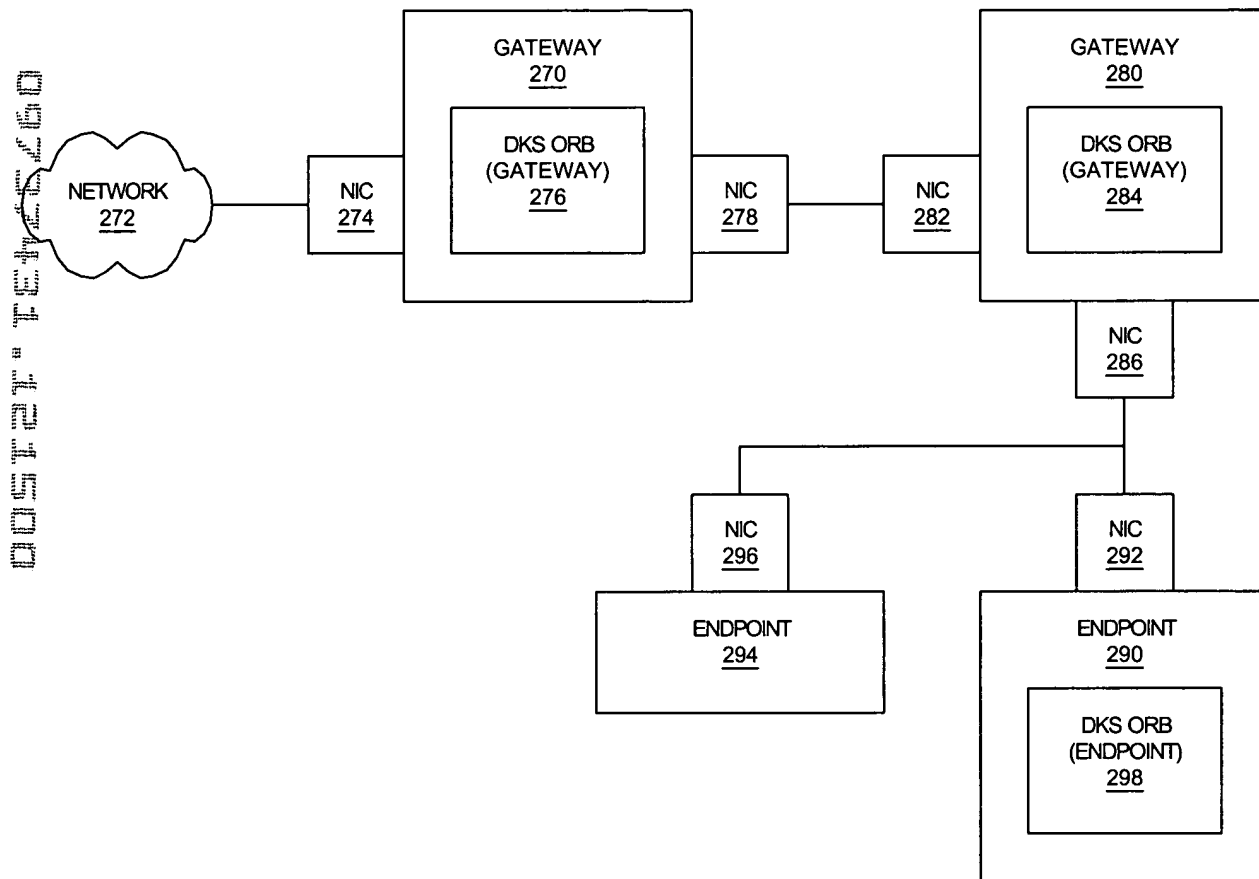


Figure 2G

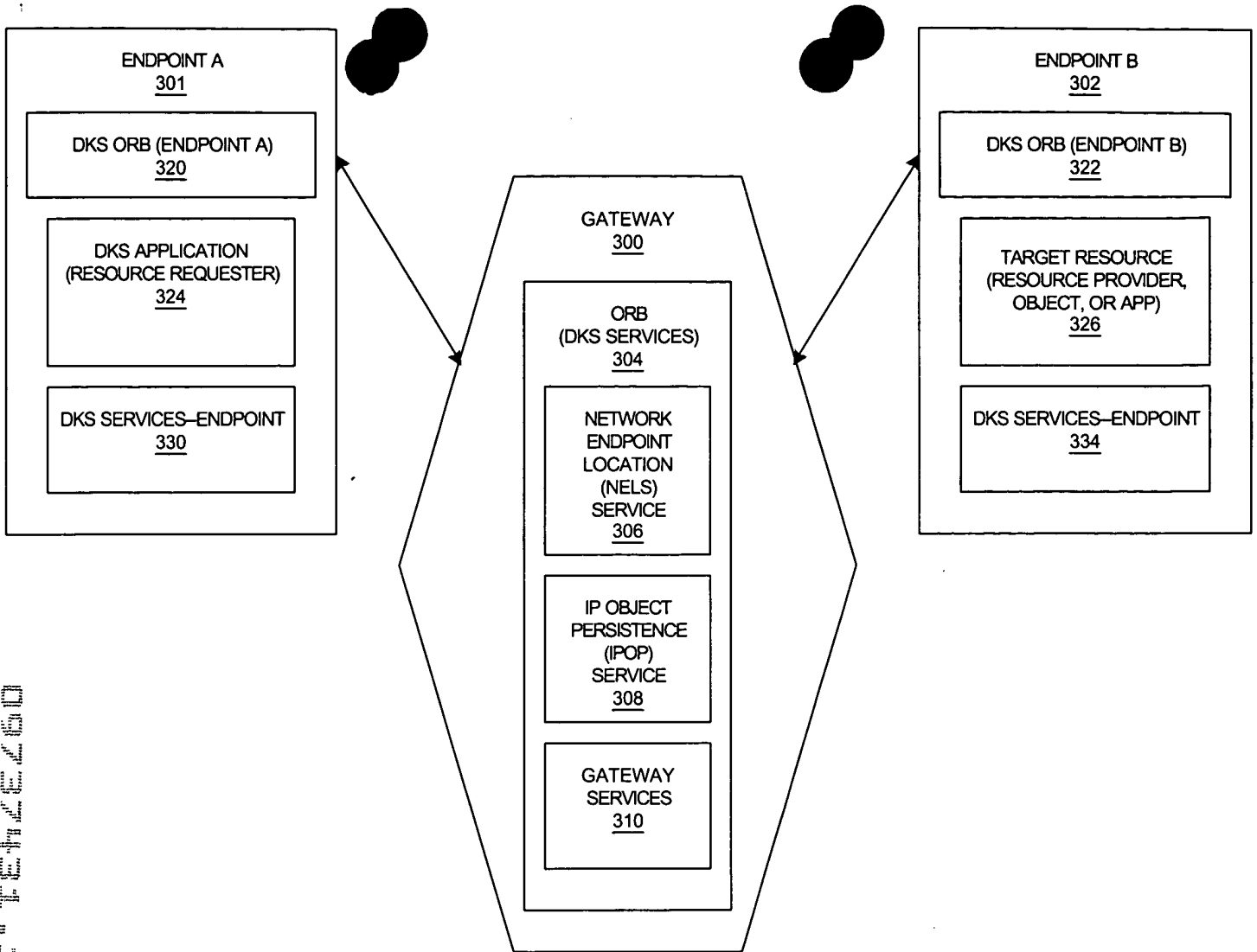


Figure 3

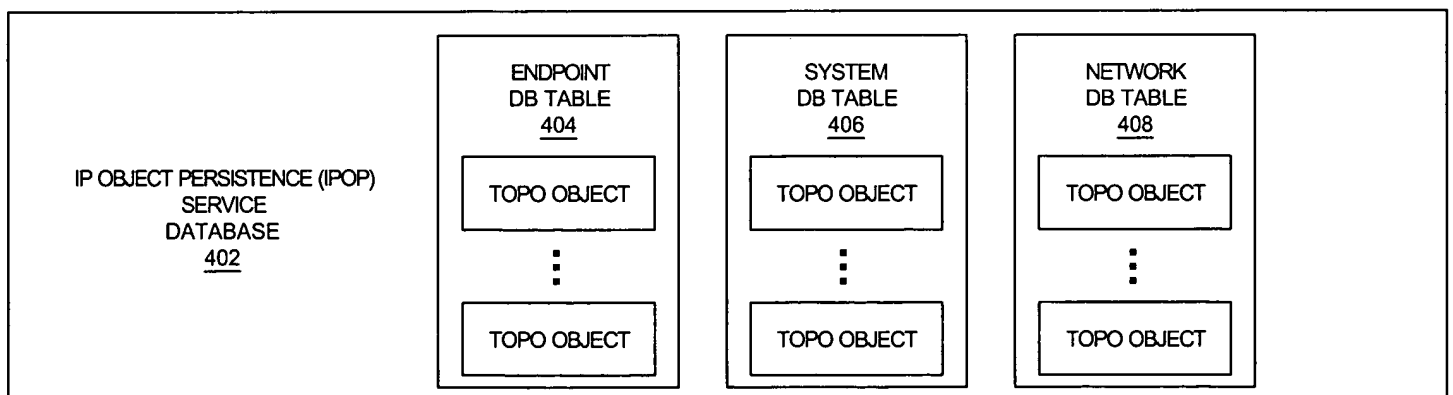


Figure 4

092741-121500

500

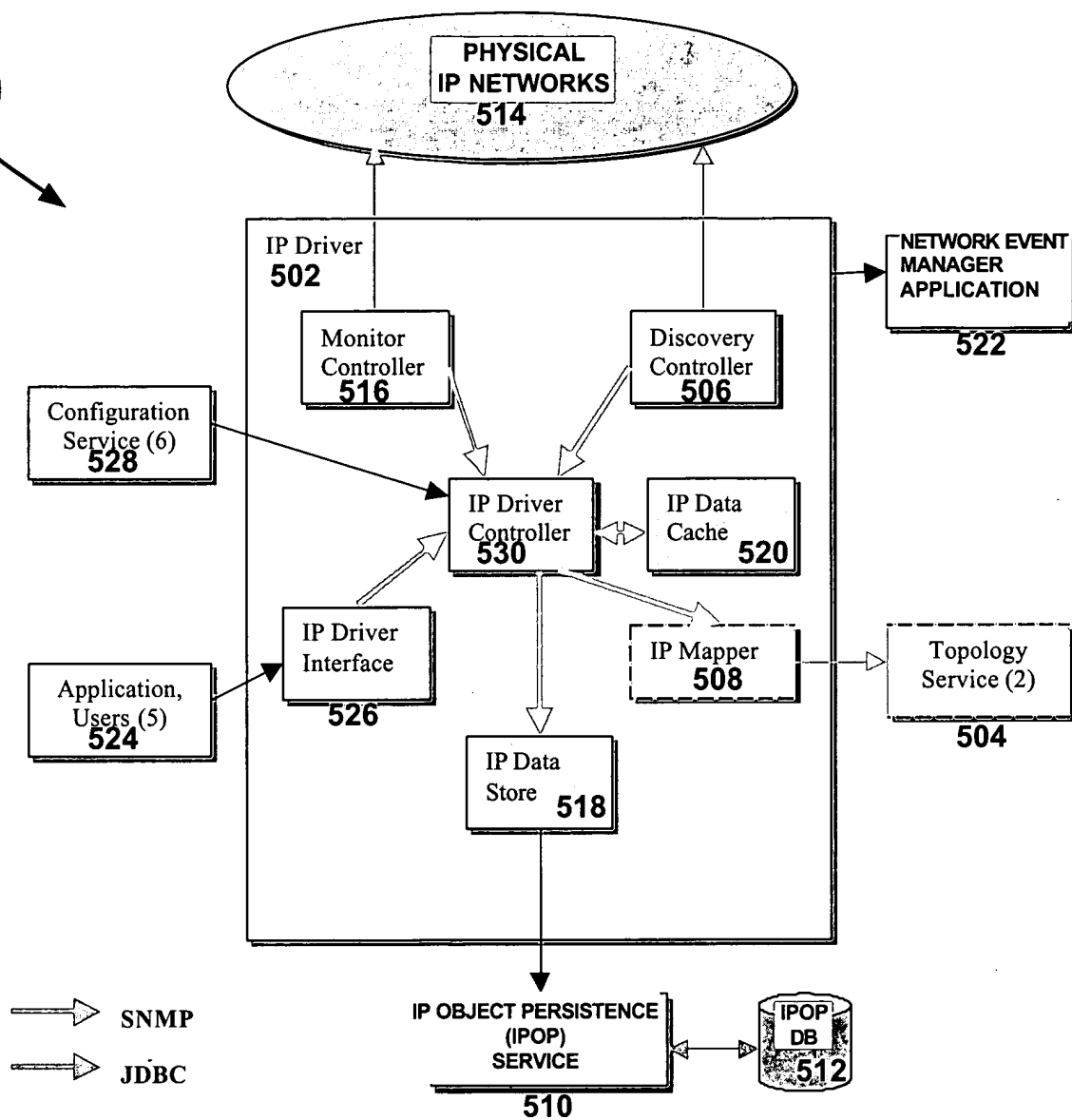


Figure 5A

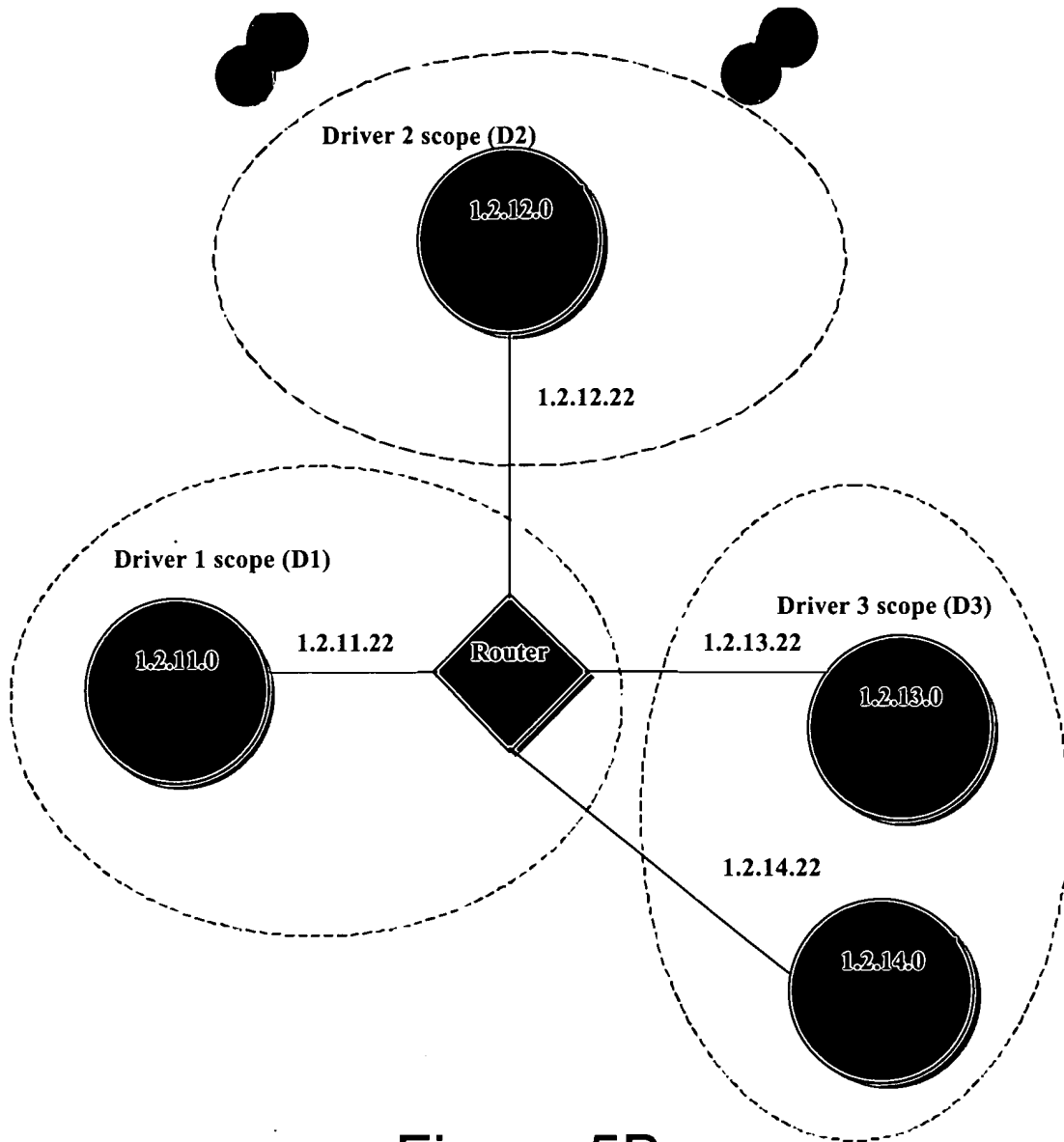


Figure 5B

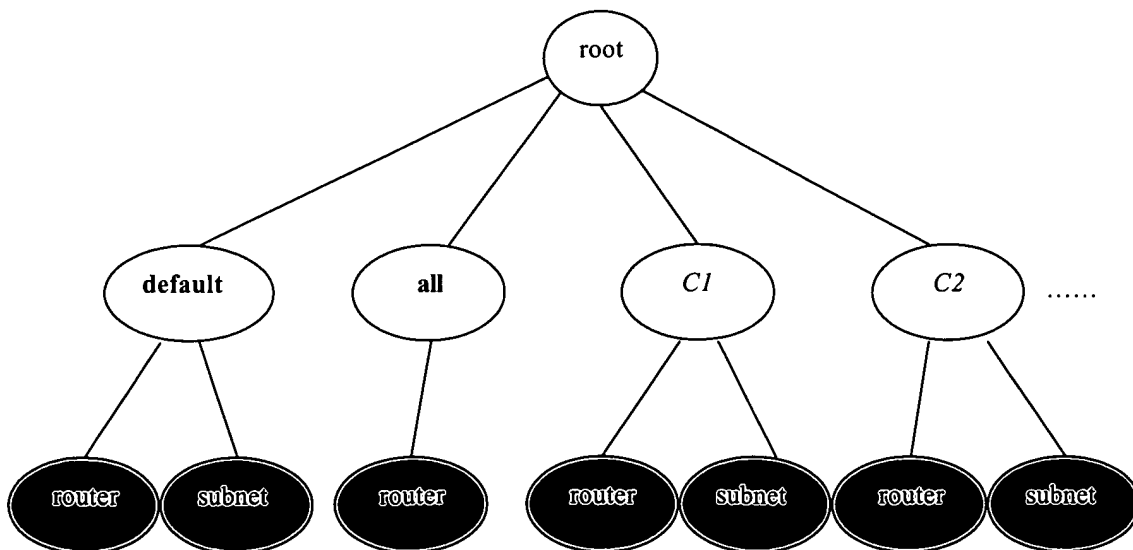


Figure 5C

005727-1

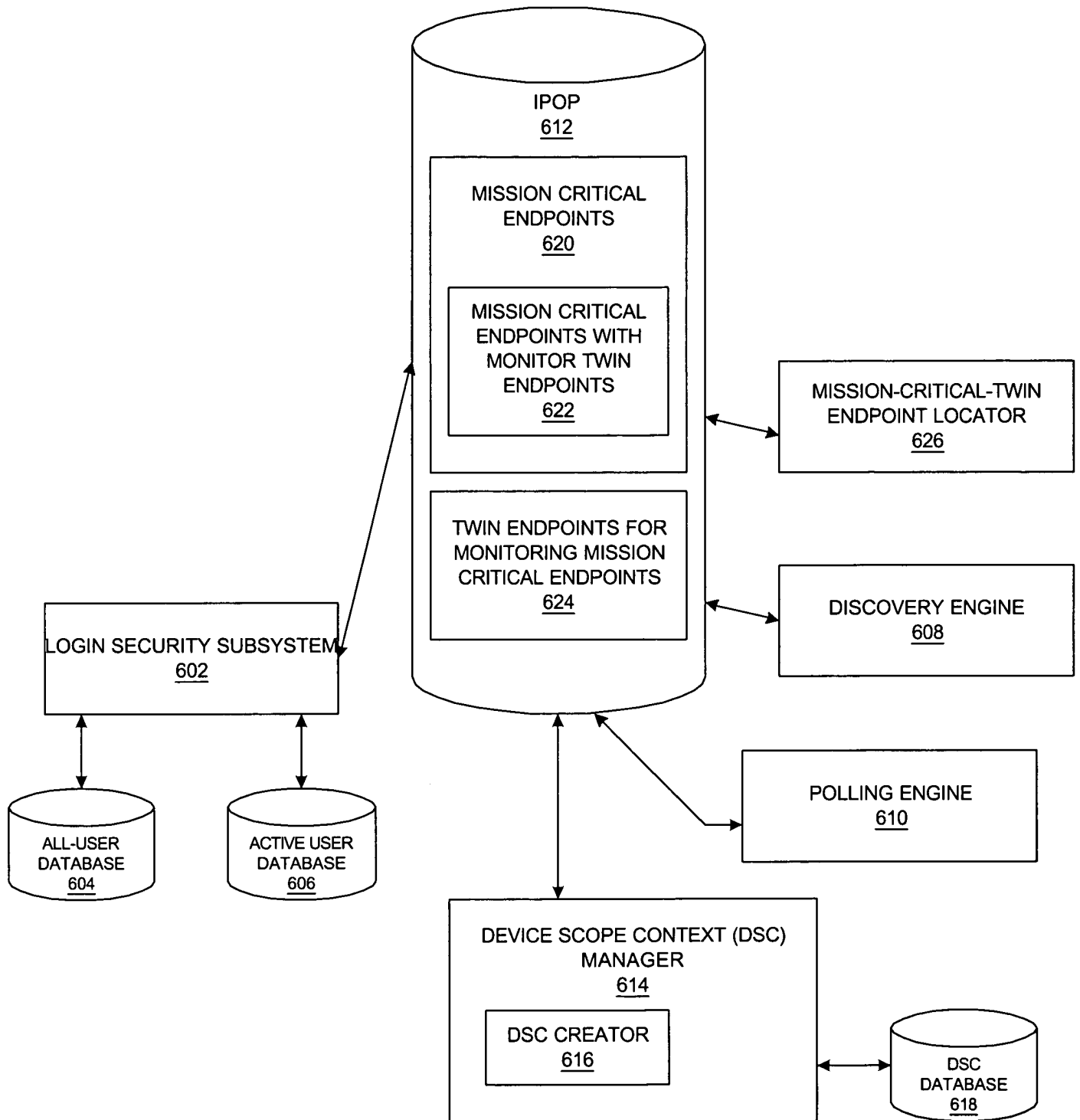


Figure 6

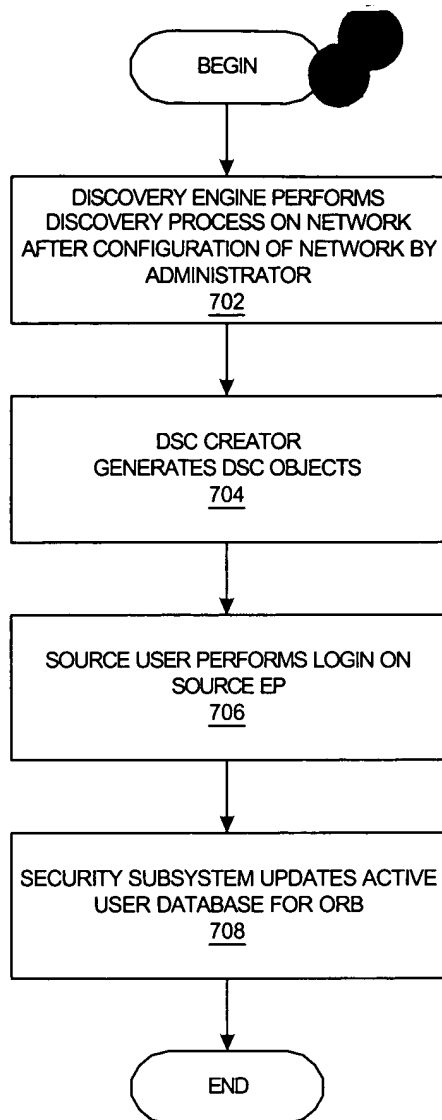


Figure 7A

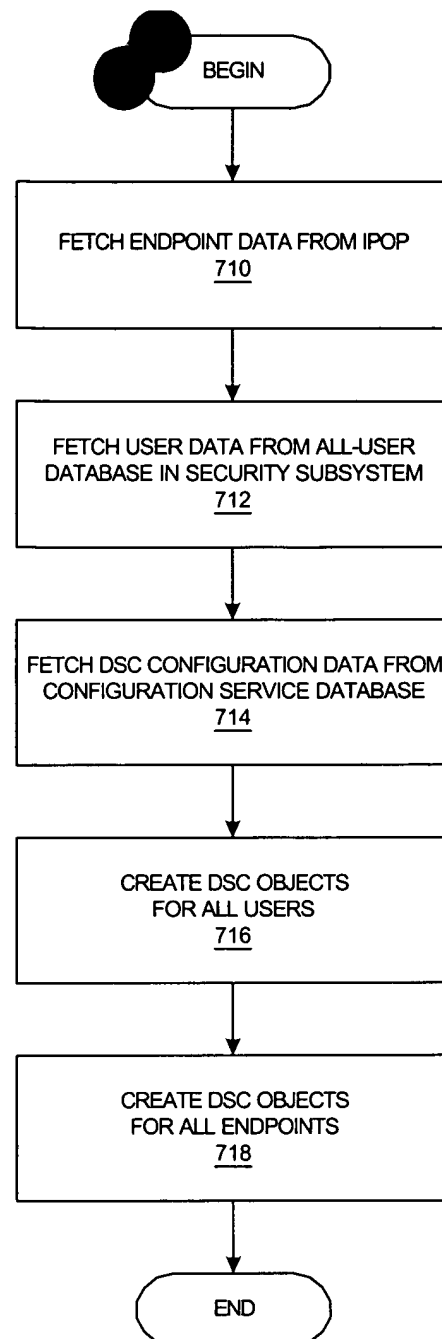


Figure 7B

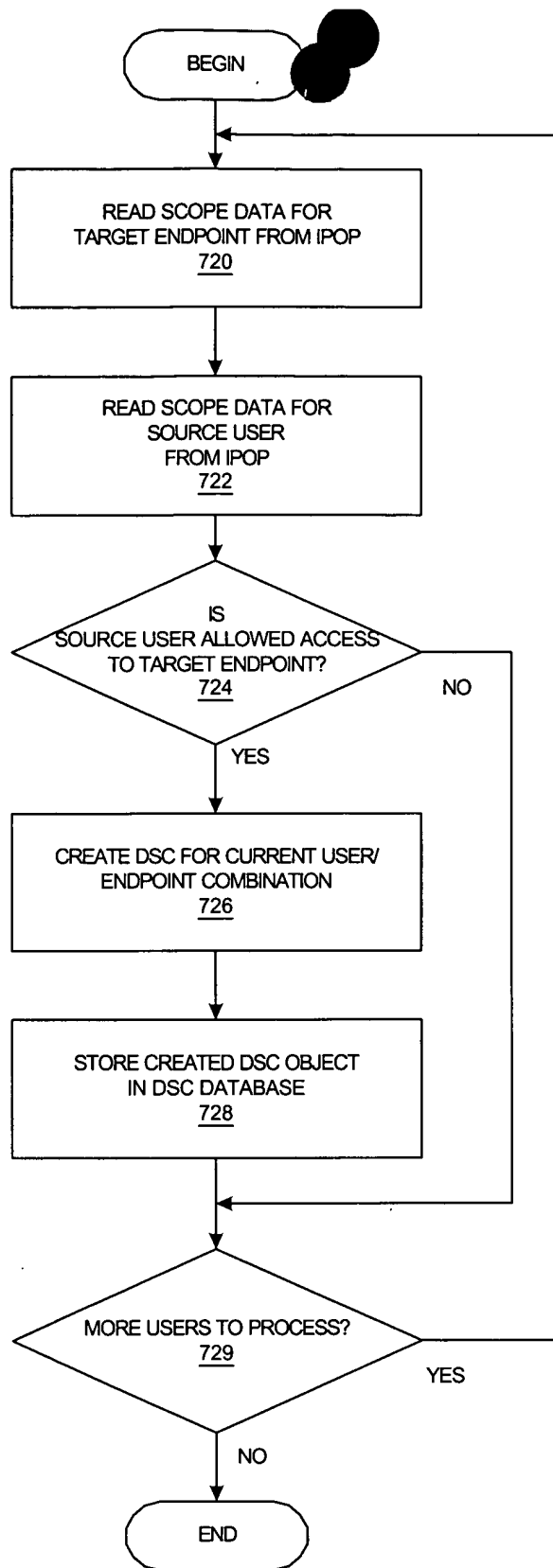


Figure 7C

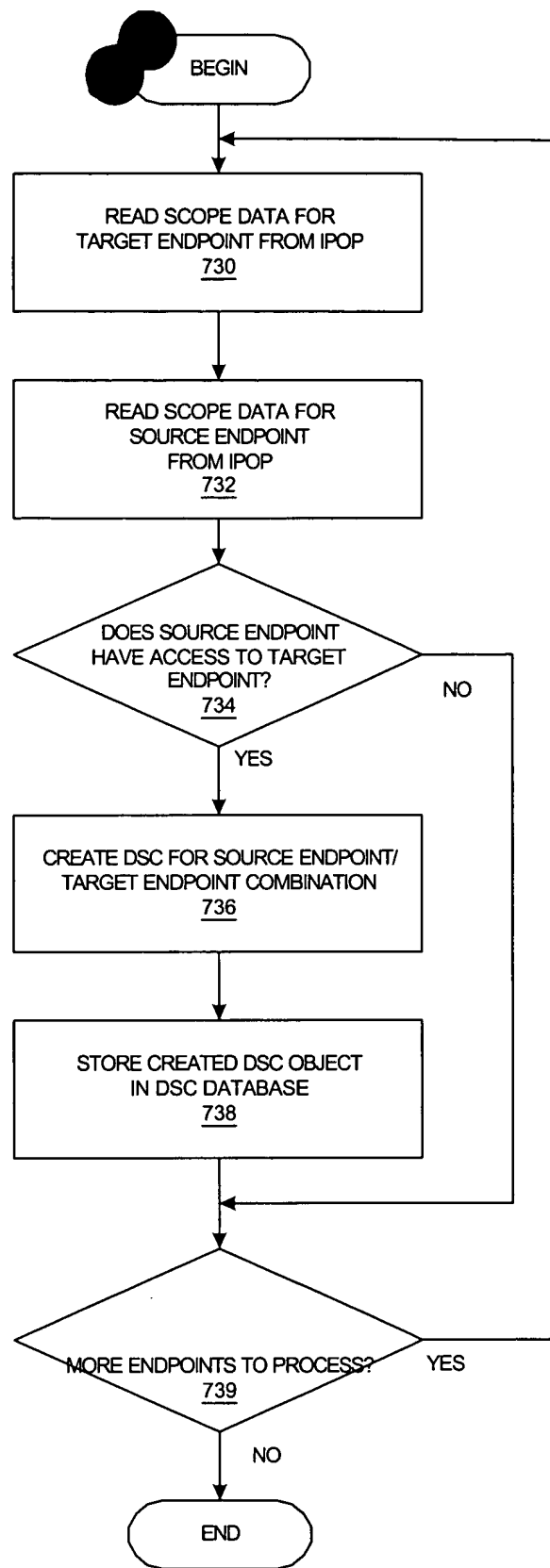


Figure 7D

Network Management Application

800

ADAPTIVE MONITORING SETTINGS

POLLING INTERVAL

15

804

MINUTES

805

807

☒

SOURCE USER

JOHN.ADAMS

806

☐

SOURCE ENDPOINT

CUSTOMER1.IDAHO.BOISE.DEV3498

808

PRIMARY DSC

☒

BY USER

812

☐

BY ENDPOINT

814

802

810

SET

816

CLEAR

818

Figure 8A

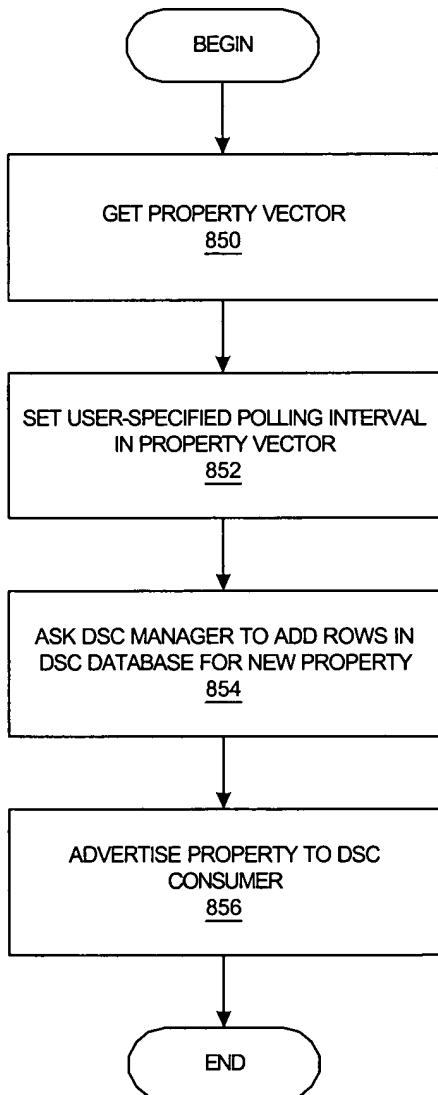


Figure 8C

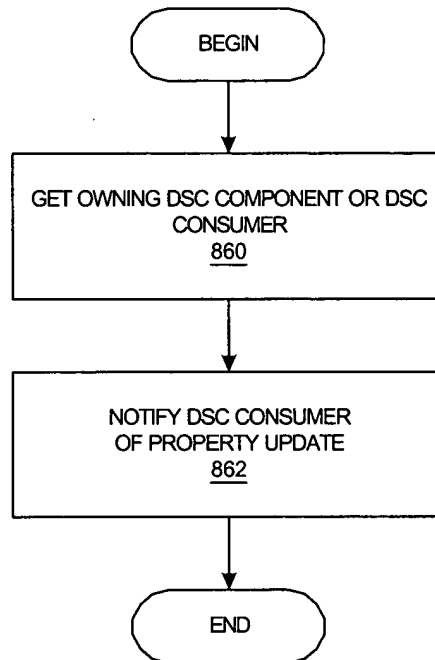


Figure 8D

005727 1 24 15 00

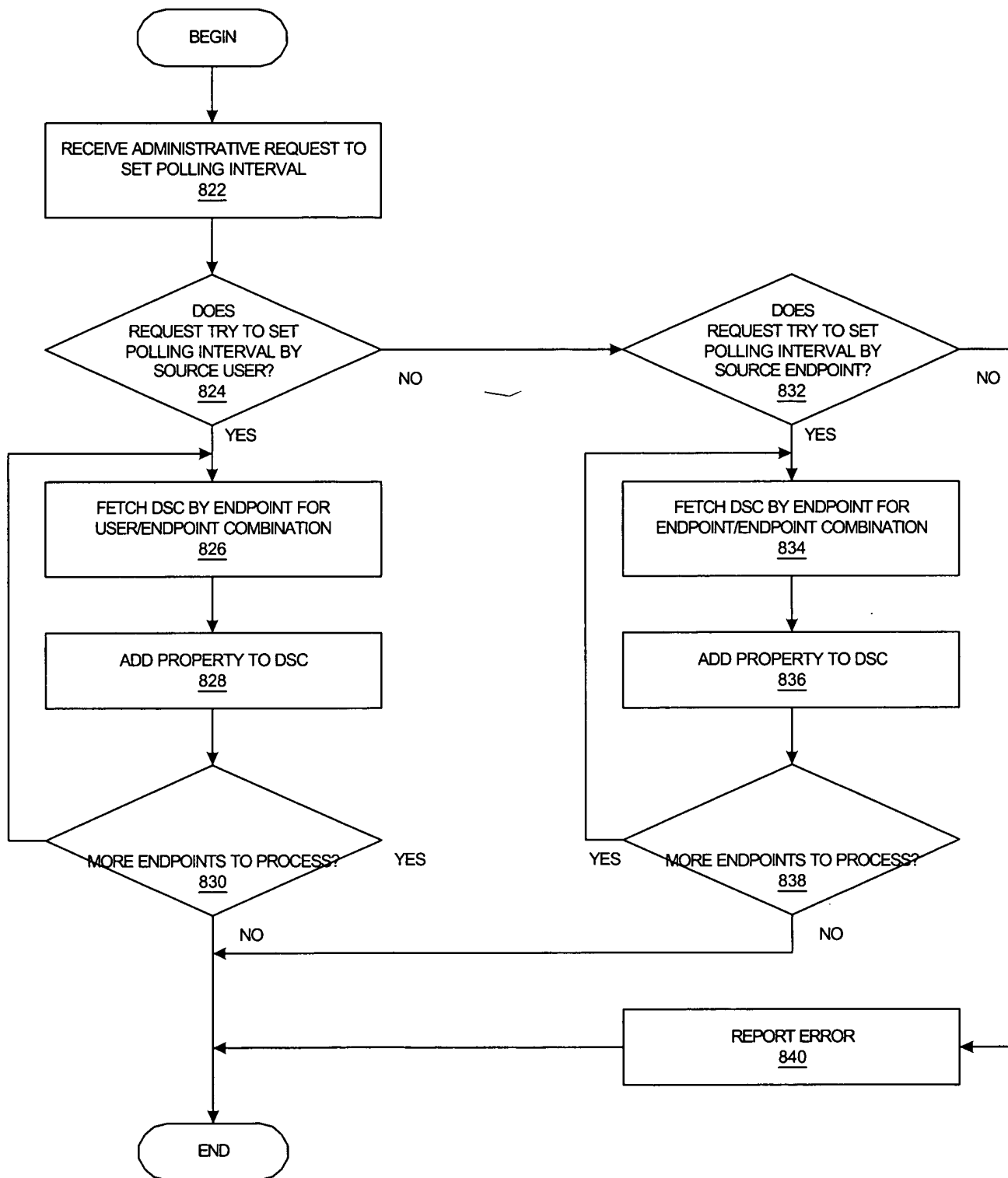


Figure 8B

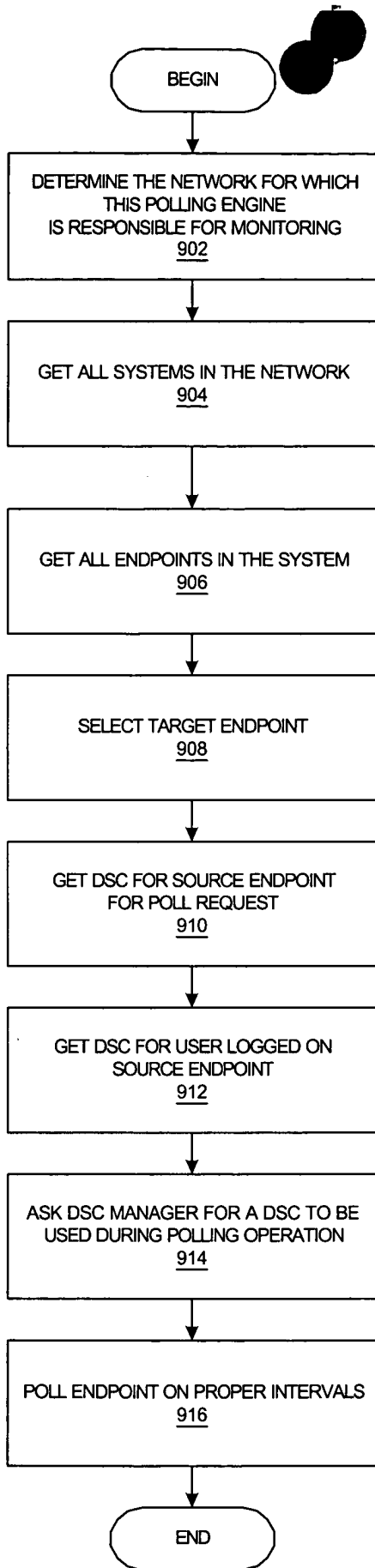


Figure 9A

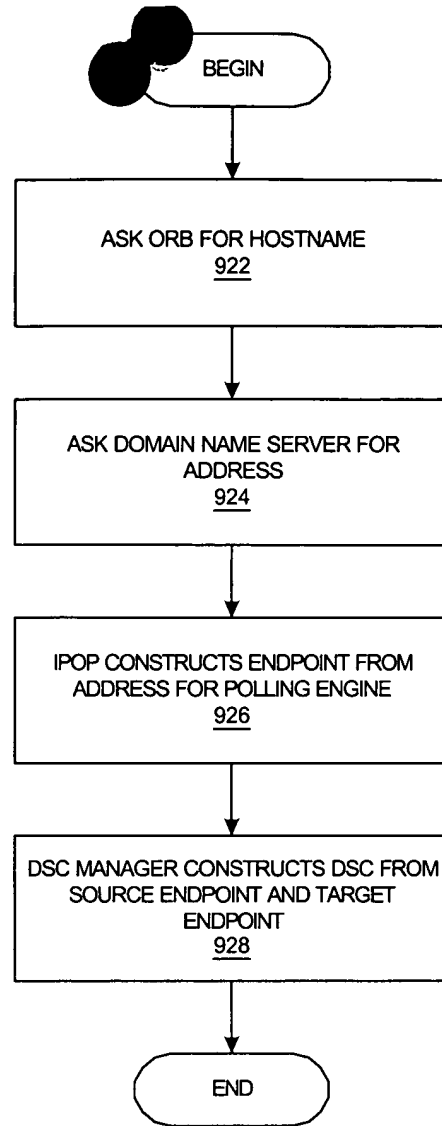


Figure 9B

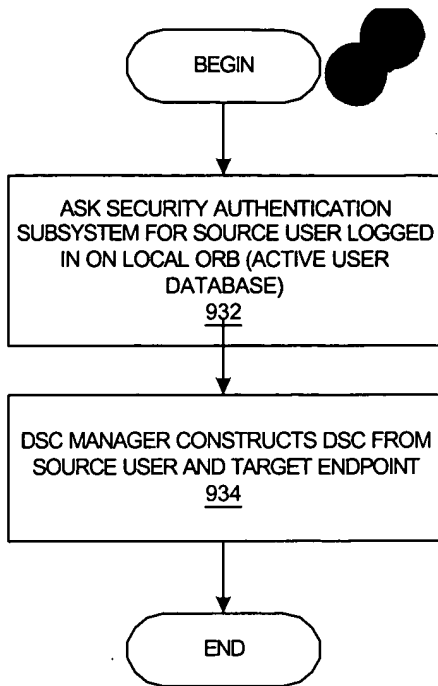


Figure 9C

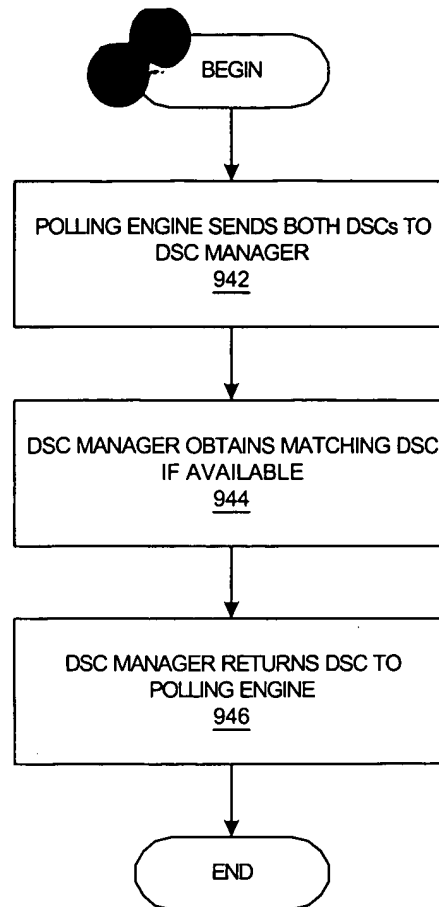


Figure 9D

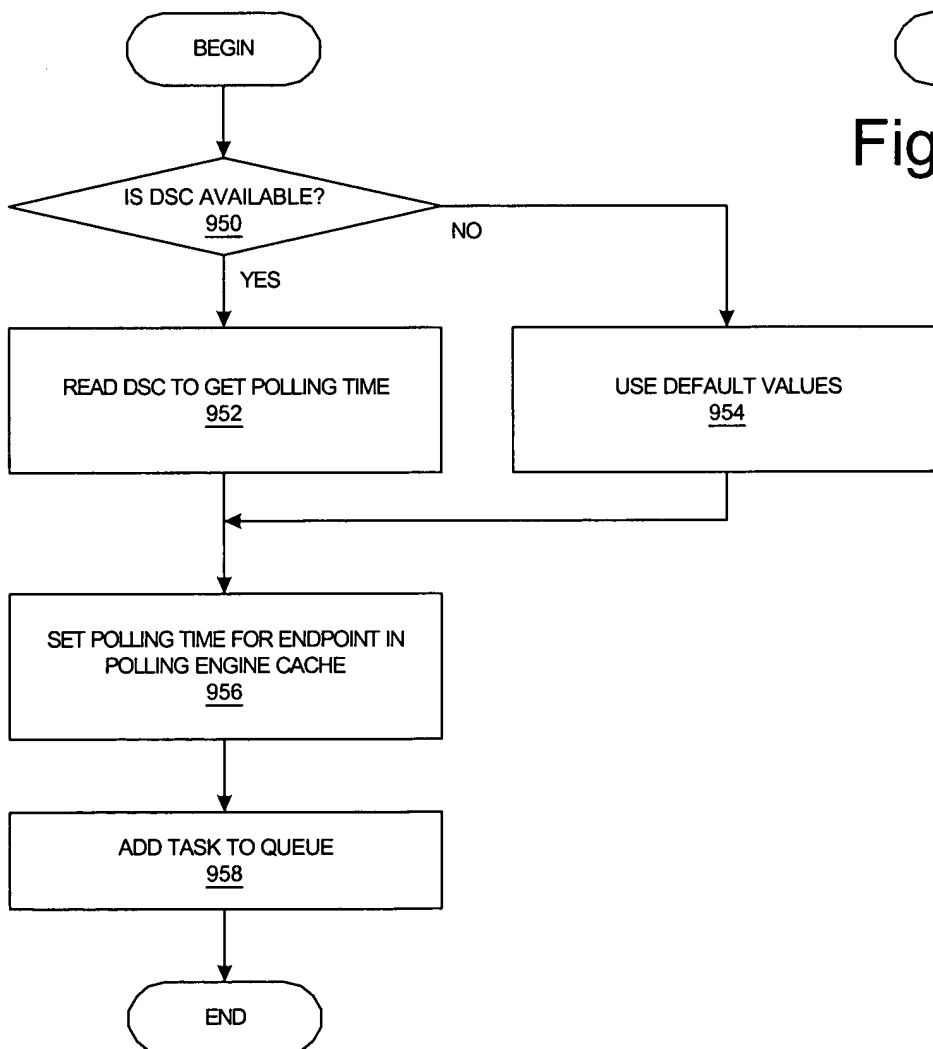


Figure 9E

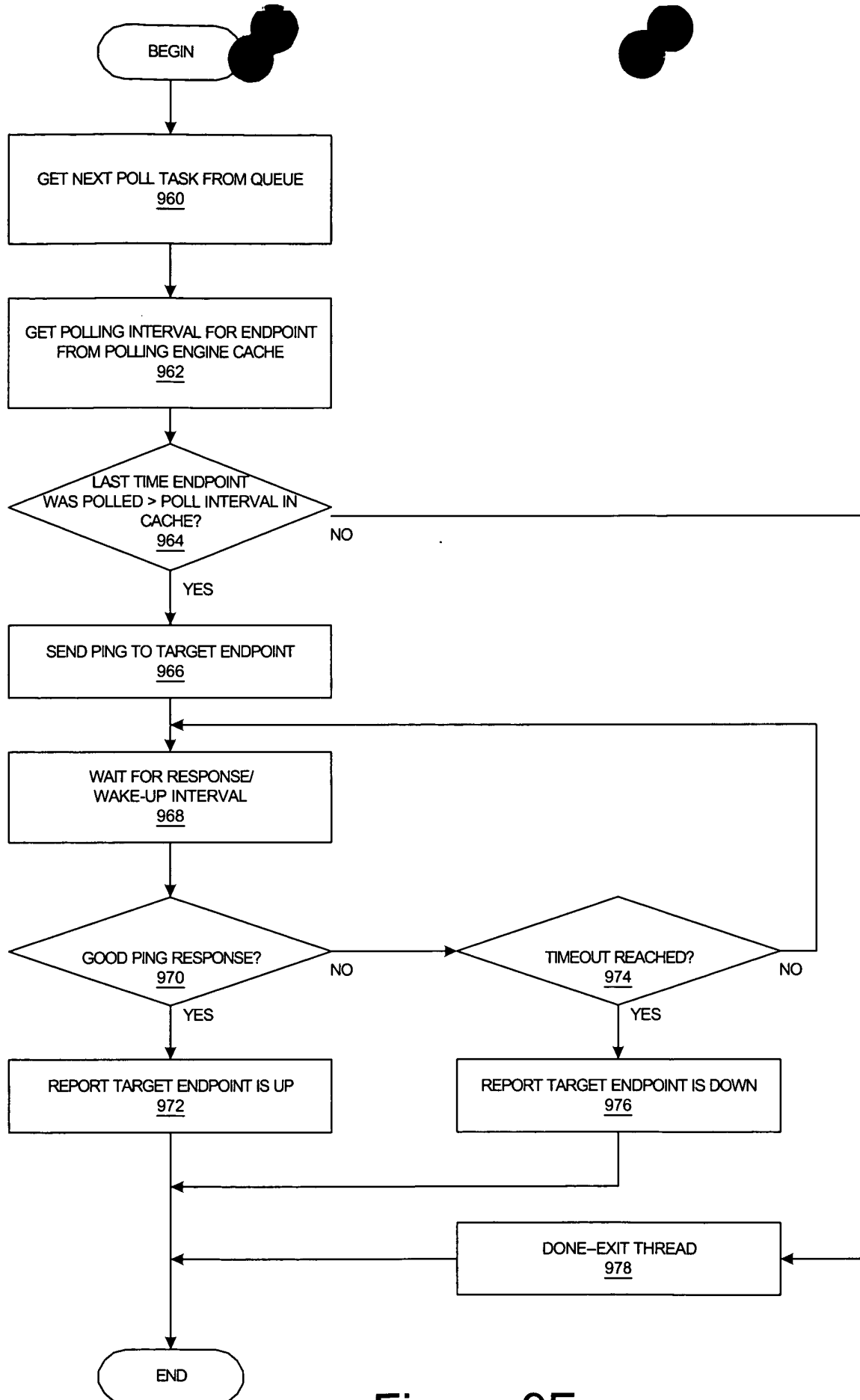


Figure 9F

09737431.121500

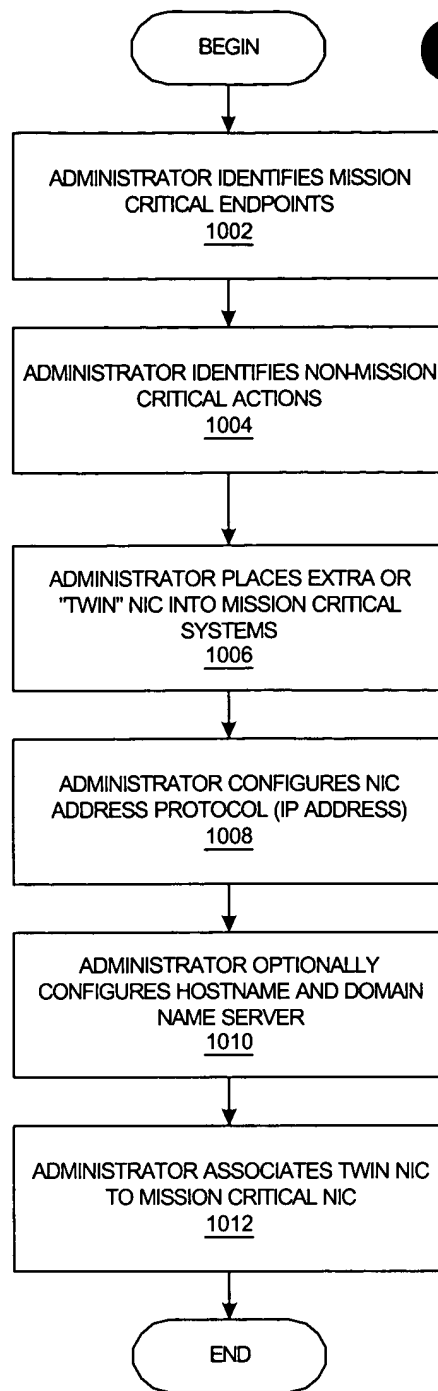


Figure 10A

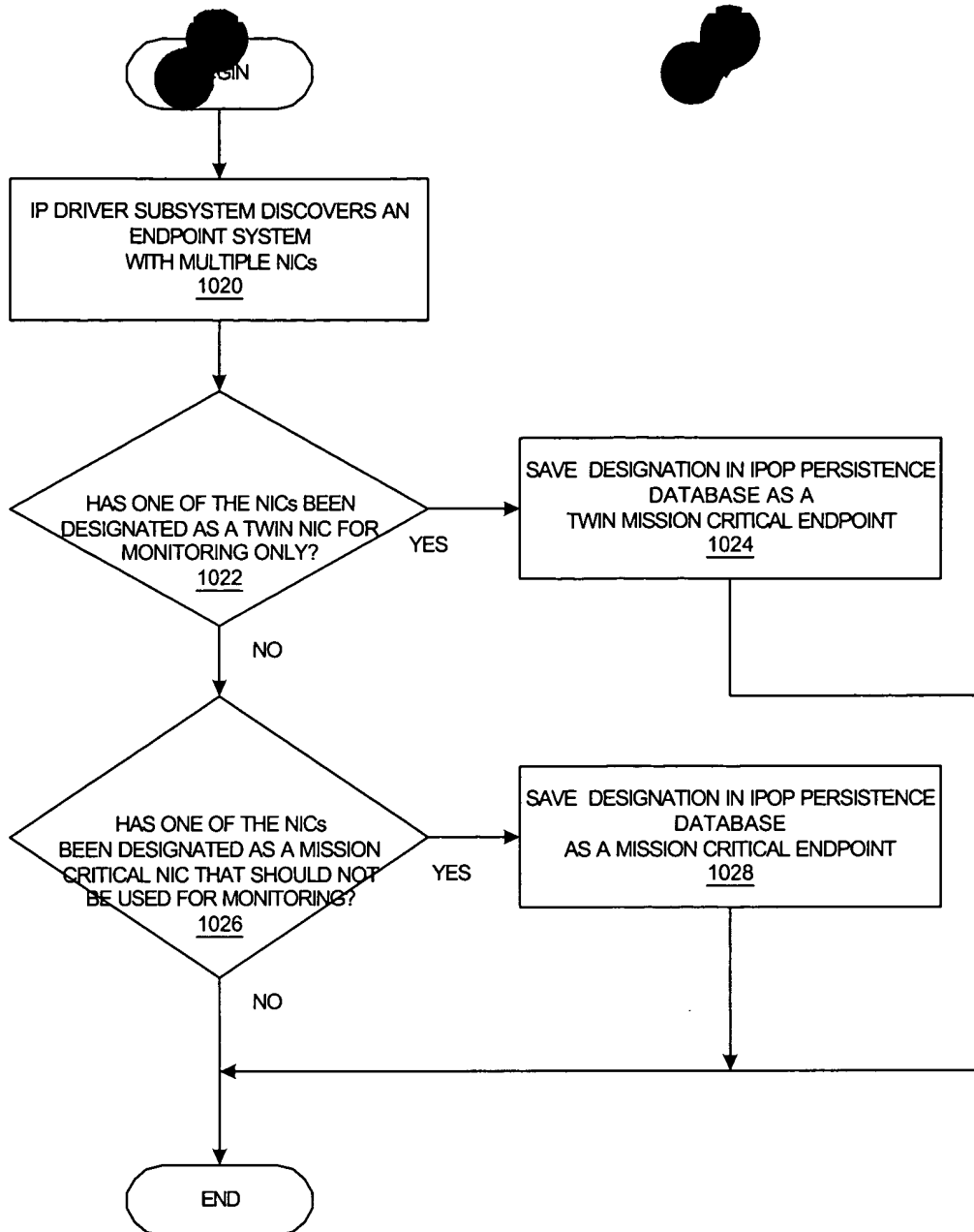


Figure 10B

005727-154260

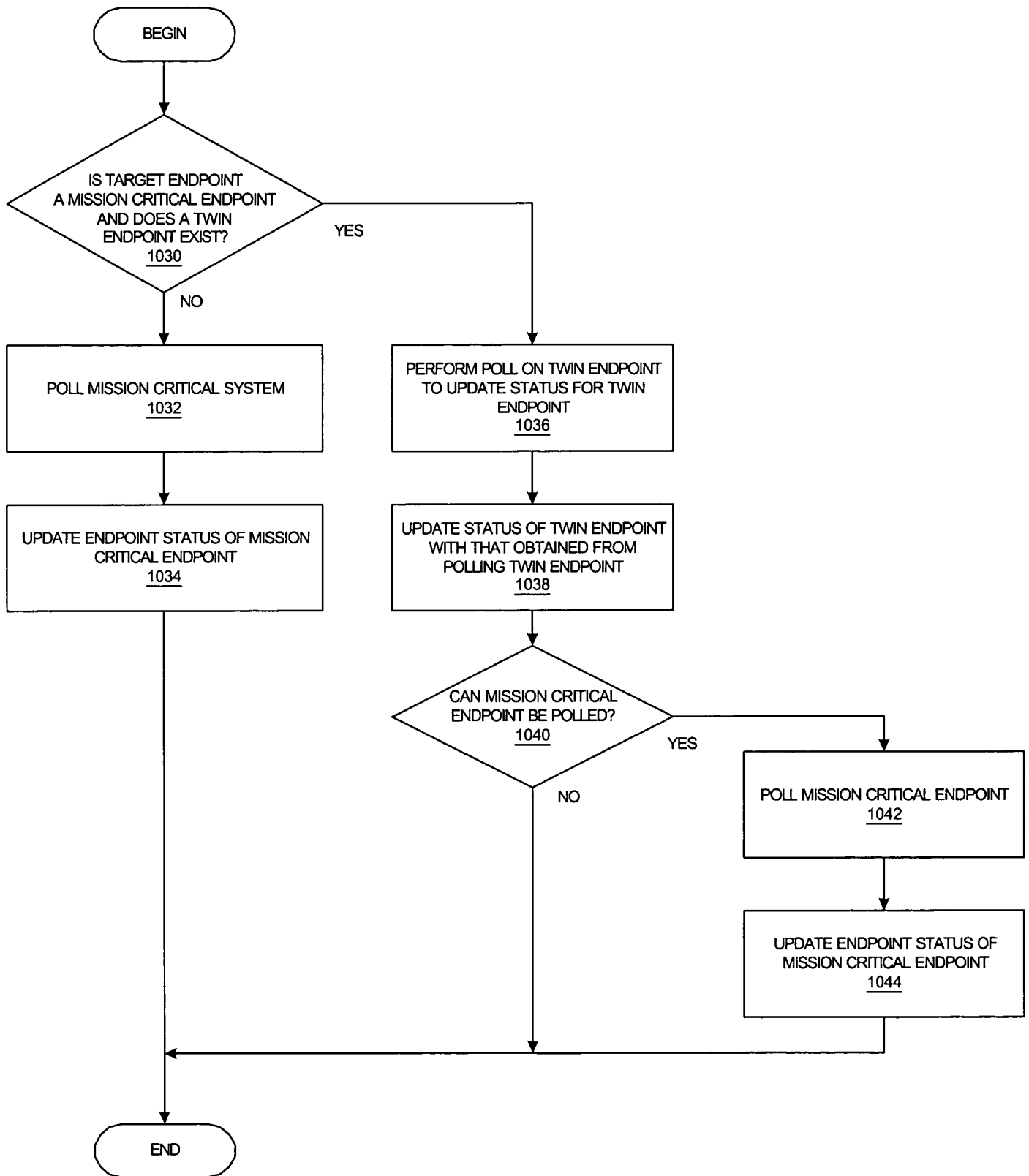


Figure 10C

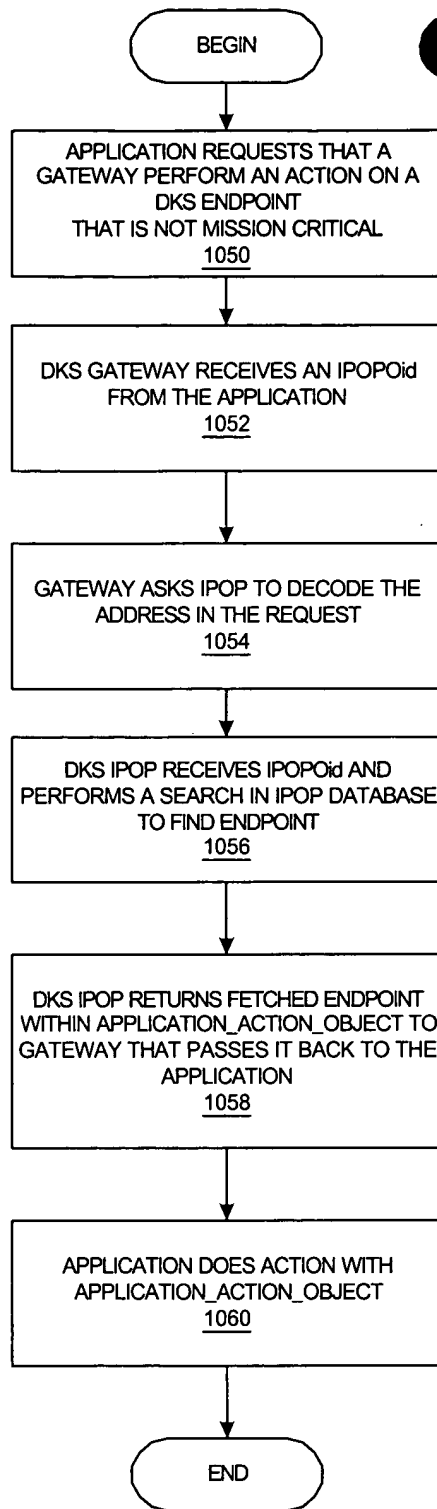


Figure 10D

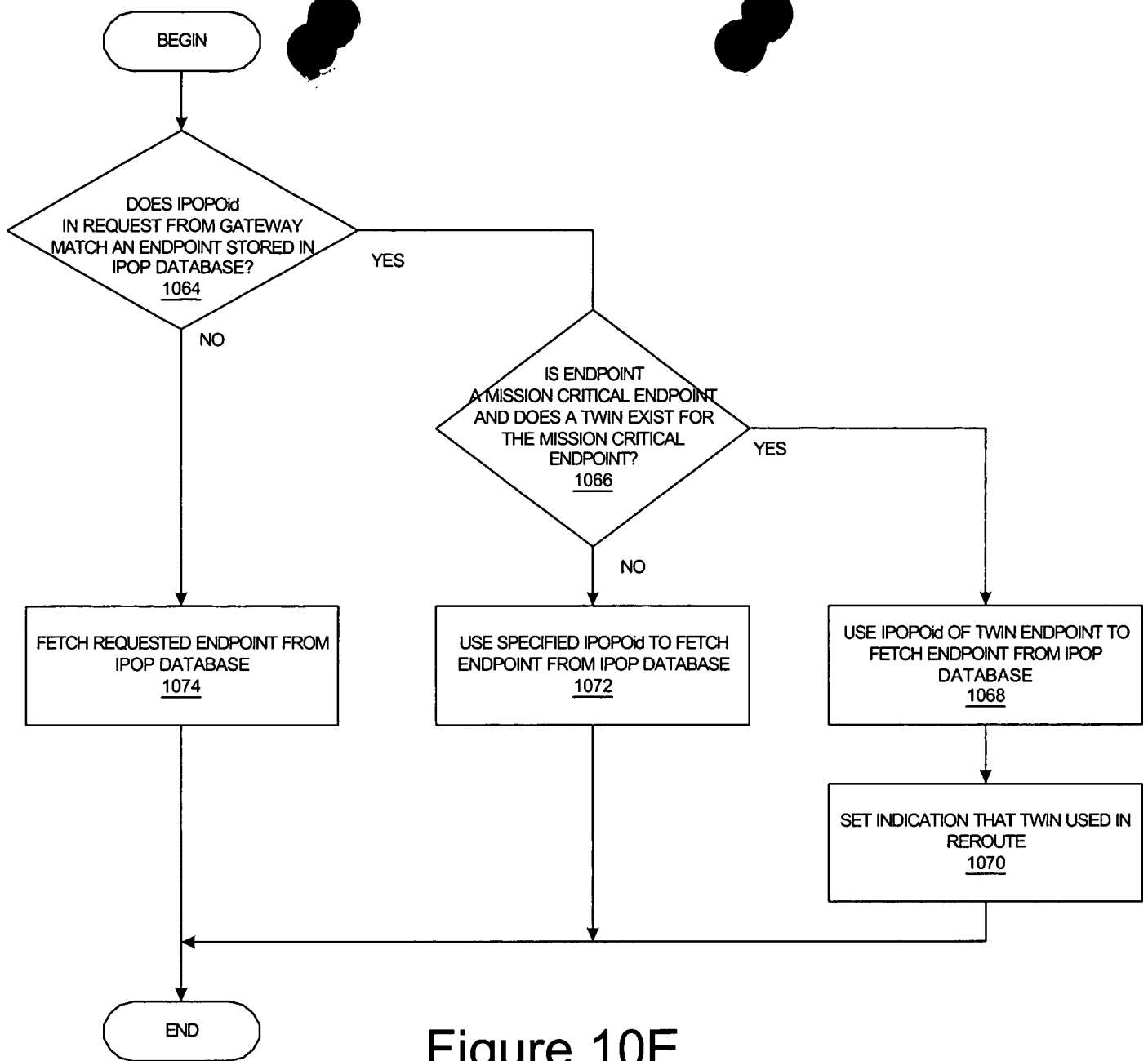


Figure 10E

1090

The screenshot shows a window titled 'Network Management Application'. Inside, there is a section titled 'MISSION CRITICAL TWIN ASSIGNMENT--MISSION CRITICAL ENDPOINT: 7.17.13.11'. Below this, it says 'ENDPOINT TO USE AS TWIN:'. There are two radio buttons: one with an empty box and one with an 'X' (labeled 1092). The first radio button is for 'MAC ADDRESS' (labeled 1093) and the second is for 'VPN NUMBER' (labeled 1094). There are two text input fields: one for 'IP ADDRESS' (labeled 1095). To the right of the input fields are two buttons: 'SET' (labeled 1096) and 'CLEAR' (labeled 1097). The label 1091 points to the mission critical endpoint text.

Figure 10F

```

CLASS ACTION_OBJECT {

    // CONSTRUCTOR
    ACTION_OBJECT( LONG IPADDRESS, SHORT VIRTUALPRIVATENETWORKADDRESS )
        THROWS BADADDRESS ...

    .
    .
    .
    VOID PERFORMACTION( ) // EXECUTES ACTION METHOD

    .
    .
    .
}

```

Figure 11A

```

CLASS APPLICATION_ACTION_OBJECT EXTENDS ACTION_OBJECT {

    boolean IsMissionCriticalAction; // TRUE = USED TO PERFORM ENTERPRISE-RELATED WORK
                                     // FALSE = USED TO PERFORM MONITORING OPERATIONS
                                     //      OR OTHER NON-REVENUE PRODUCING ACTION

    boolean TwinUsedinReroute        // TRUE = IPOP HAS REPLACED REQUESTED ADDRESS WITH
                                     //      AN ADDRESS THAT CAN BE USED FOR
                                     //      NON-MISSION CRITICAL ACTION

    .
    .
    .
}

```

Figure 11B

09737434.121500

Public Class Endpoint {

//public variables

long

InetAddress

long

EPObjectID;

EPIPAddress;

EPVPN;

//ID to object (both private and public network addresses)

//physical network address (private or public)

//virtual private network ID

//get/set of variables

public long

public InetAddress

public long

getObjectID() { ... }

getPAddress() { ... }

getVPN() { ... }

}

Figure 11C

Class TwinMissionCriticalEndpoint extends Endpoint {

.

.

.

IPOPOid

IPOPOid

missionCriticalEndpoint; // Mission critical endpoint that is used to gather status

missionCriticalSystem; // Mission critical system

long

long

endpointStatus;

twinEndpointStatus;

.

.

.

.

}

Figure 11D

Class MissionCriticalEndpoint extends Endpoint {

.

.

.

boolean

useForMonitoring;

// TRUE = endpoint can be used for monitoring, polling,

// and other system-management-type resources

.

.

.

}

Figure 11E